

U.S. Patent No. 5,066,142 to DeFrank, et al. ("DeFrank"); claims 1-3, 6, 9, 13, 17 and 20 have been rejected to as allegedly anticipated by U.S. Patent No. 6,047,205 to Pompei ("Pompei '205"); and finally, claims 7, 8, 18 and 19 were rejected to as allegedly obvious under 35 U.S.C. § 103(a) over DeFrank taken in view of U.S. Patent No. 5,893,833 to Pompei, et al. ("Pompei '833"), and further in view of European Patent No. 411,121 A1 ("EP").

Applicants, in response to the formal objection to claim 5, have amended this claim. The amendment establishes its dependency on claim 4, which, as noted by the Examiner, includes a "first switch." It is believed that the amendment to claim 5 resolves this formal rejection.

On the matters of prior art, applicants respectfully traverse the rejections of record.

These references neither teach nor suggest the invention claimed here. Please consider the following discussion regarding the patentability of these claims.

As a preliminary matter, and in stark contrast with the prior art, the present invention is directed to a new and unique infrared (IR) thermometer design. Specifically, the inventive design of the application expands the use and flexibility of a traditional tympanic thermometer by modifying its probe construction. The new probe design here utilizes, e.g., a mountable probe head on a fixed probe tip (claim 1) that permits use of the IR sensor to measure temperature at patient sites beyond the ear canal/tympanic membrane. Select and replaceable probe head designs are disclosed to collect IR radiation from flat surfaces and awkward angles on a patient. A multi-switch configuration permits keyed sensor data processing depending on the probe head or tip arrangement in place to ensure application of the proper algorithm in signal processing. Please refer to the specific discussion found on page 2, lines 13-22 and page 4, lines 4-23.

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The foregoing features and objectives are simply not disclosed or even suggested in the prior art. The principal reference, <u>DeFrank</u> is directed to a <u>disposable</u> film-based sanitary cover for use on a conventional tympanic thermometer. It is important to note the fundamental difference between a probe cover and probe tip. The disclosure relied on by the Examiner includes details of the probe design that is enveloped by the disposable cover. There is, however, no disclosure of a demountable probe tip that permits the use of alternate tip or head configurations for temperature measurement. It is respectfully submitted that the specified reliance on Fig. 4 of <u>DeFrank</u> for this concept is misplaced. Figure 4 is merely an "exploded" assembly view (see col. 2, line 66) of the elements found in <u>DeFrank</u>'s probe. It does <u>not</u> disclose, nor suggest a demountable probe tip found in the present invention.

Further distinctions between the reference and the instant claims exist, including the "switch" of <u>DeFrank</u>, cited by the Examiner at col. 5, lines 48-55. In the <u>DeFrank</u> reference, a switch insures that a fresh disposable cover is in place before allowing a temperature reading. However, there is no teaching of a switch to detect and/or discriminate between a probe tip or demountable probe head to permit the sensing of IR radiation at alternate measurement sites. Indeed, the departure in design between <u>DeFrank</u> and the present invention precludes such a suggestion. Accordingly, the anticipated rejections based on this teaching should be withdrawn.

It is respectfully submitted that <u>Pompei '205</u> suffers similar difficulties as an effective reference to the present invention. Again, <u>Pompei '205</u> is a conventional tympanic thermometer that does <u>not</u> utilize demountable probe tips or switches keyed thereto. The probe tip of <u>Pompei '205</u> is not pivotal on any basis and the cited discussion in <u>Pompei '205</u> is

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referring to pivoting the entire thermometer, not the tip, which is clearly shown as fixed at 15° in Fig. 2 of Pompei '205. No anticipation exists.

Finally, it is respectfully submitted that the obviousness rejection is not well taken. There is simply no teaching or suggestion to alter DeFrank by placing a funnel shaped probe tip alleged in Pompei '833, on the DeFrank ear thermometer. Not only does the proposed arrangement remain distinct from the claims, no such proposed substitution is tenable as it would defeat the very purpose of DeFrank - directed to an elastic disposable sanitary cover and probe tip shape and specific design for use in the patient's ear. The EP reference cannot supplement this, explicitly or implicitly, as it merely depicts a conventional frustoconical probe tip found in nearly all tympanic thermometers. The remaining salient claim features are simply absent in toto.

In view of the above remarks, it is respectfully submitted that the claims of record are allowable and in condition for issuance. Withdrawal of the rejections of record is earnestly solicited.

Enclosed herewith is a petition and fee for a three month extension of time within which to respond to the instant Office Action. Please charge any insufficiency in the fee to Deposit Account No. 08-2776.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service on January 17, 2003 as First Class Mail in an envelope addressed to:

Commissioner of Patents and Trademarks Office.

Washington, D.C.

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## Marked Up Version of Claim

5. The infrared thermometer as claimed in [claim 1] claim 4, wherein the infrared thermometer includes a second switch (4) actuatable when a protective cover (6) is installed over the probe tip (2), and that the calculation of a temperature indication value from the temperature measurement values is influenced by actuation of said second switch (4).